

Over the Alleghenies: Early Canals and Railroads of Pennsylvania

By Robert J. Kapsch

Morgantown: West Virginia University Press, 2013

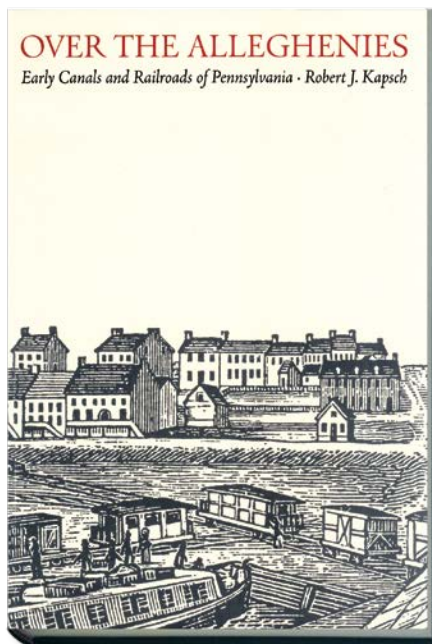
376 pps., maps, photographs, bibliography

\$39.99 paperback

Reviewed by Andrew Stroud

In 1825 the Commonwealth of Pennsylvania was faced with a dilemma: whether to build a canal or a railroad to compete with New York's newly completed Erie Canal. The controversy involved the use of conventional stillwater canals to cross the Allegheny Mountains and connect Philadelphia with Pittsburgh, or to use the neophyte technology of railroads. In the new book *Over the Alleghenies: Early Canals and Railroads of Pennsylvania*, veteran canal historian and engineer Robert Kapsch tells the story of the engineering, economic, and political history of this early system of transportation.

After the War of 1812, politicians in East Coast states began to see the need for lines of transportation to connect with the growing Ohio Valley and Great Lakes regions. New York was fortunate in that receding glaciers had left a



high shoreline around Lake Ontario, which was perfect for a contour canal from Albany over to Lake Erie. With no mountains to cross, the Erie Canal was built across relatively flat areas of land and required few technological innovations. Pennsylvania was different: the same glaciers had left a topography of twisting ridges, narrow river valleys, and the problematic Susquehanna River. With no easy route through the veil of mountains, the engineers were forced to build riverside canals through the steep valleys. This direct connection to the temperamental rivers made the canals extremely sensitive to floods and droughts. Between the east-west river

systems was the Allegheny Ridge—a 35-mile wall of heavily forested mountain that rose 1,200 feet above the headwaters. After looking at canal, tunnel, and turnpike options, the engineers settled on a complicated railroad arrangement. The resulting Allegheny Portage Railroad was a marvel of its time.

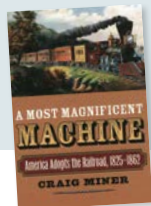
Political maneuvering complicated the grand scheme of the Pennsylvania Public Works. To sell the concept of the canal, promoters rationalized financial and technological miscalculations that wildly underestimated the scope of the project. The project was then fast-tracked without a clear plan to vault the mountains. Expensive lateral canal projects were initiated to entice politicians from the fringe counties to support the Mainline. Bonds to finance the project were then shunned as it became apparent that the construction costs far exceeded estimates, and that maintenance costs alone outstripped income from tolls. The heavy debt from the Public Works placed Pennsylvania in a precarious position when the Panic of 1837 arrived.

Despite its many shortcomings and expense, the Public Works succeeded in creating

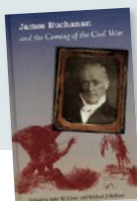


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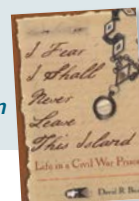
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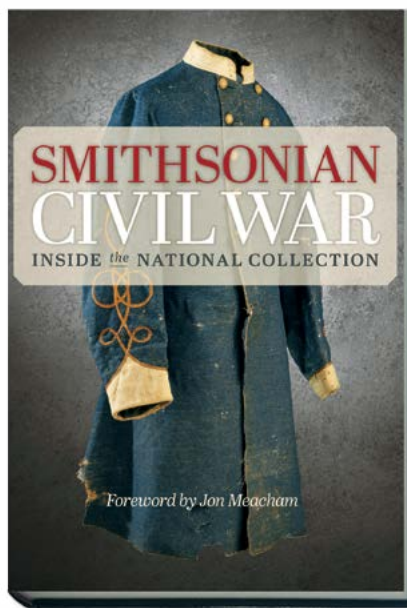
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an expanded transportation link between the Eastern seaboard and the Ohio/Mississippi River systems. The increased volume, lower costs, and greater speed over the turnpikes for transporting raw materials allowed fledgling industries such as iron and glass production to develop. Passenger service by packet boats made the trip west faster and more comfortable than by stagecoach. And, like the modern NASA space shuttle program, the Public Works pioneered many technological innovations.

Over the Alleghenies is a large book and is copiously illustrated with period artwork, technical drawings, and antique map reproductions. The format is uncluttered and the writing style flows easily. The focus of the book is from the mid-1820s (when construction of the system was begun) to 1857, when the Public Works was sold to the Pennsylvania Railroad. All 15 divisions of the system are reviewed and documented. Observations are often reinforced with quotations from the reports of the Pennsylvania Canal Commission, both from the commissioners and also technical reports submitted by the individual canal engineers. A substantial section of endnotes and a bibliography make the book a valuable reference. With *Over the Alleghenies*, Robert Kapsch has created a definitive textbook on the Pennsylvania Public Works that is both educational and entertaining. ✪

Andrew Stroud is a native of Pennsylvania, attended the Montana School of Mines for Geological Engineering, and is currently working on a guidebook series for the Pennsylvania Canal.



Smithsonian Civil War: Inside the National Collection

Edited by Neil Kagan; foreword by Jon Meacham
Washington, D.C.: Smithsonian Books, 2013

368 pps., color photographs, index

\$40.00 hardcover

Reviewed by Michael G. Kraus

One would expect a book featuring Civil War treasures from the Smithsonian Institution to be impressive given the amount of important material in the museum network's vast holdings. Impressive is too simple a word for *Smithsonian Civil War: Inside the National Collection*. From the moment the large hardcover arrived for review it was clear that this book was something to savor. An astounding 550 color photographs of objects that represent the heart and soul of American Civil War history come to life in 368 pages. Setting the bar for what lies inside are two iconic artifacts featured on the covers: Confederate General John S. Mosby's uniform on the front and General Ulysses S. Grant's on the back.

Putting together a comprehensive book about the Civil War is challenging, but Neil Kagan aptly edited 49 well-written essays by Smithsonian curators into a cohesive anniversary tribute. What makes this book unique is that each curator selected an artifact that he or she felt spoke to the issues of the conflict and the space around it. Rare military items, such as magnificent presentation swords given to Generals Judson Kilpatrick and Phil Sheridan, share equal space with more utilitarian objects, like postage stamps and illustrated envelope covers. Other topics include artifacts that evoke the pain and reality of slavery and the new domain African American soldiers entered with the birth of the United States Colored Troops. More pieces chronicle the growth of technology and industry, arsenals, music, and even Native Americans issues. Page after page reveals the depth of the Smithsonian collection and the multifaceted knowledge of the curatorial staff.

As a coffee table book, reference book, or as a gift to your favorite Civil War buff, this volume is well worth having. Even the most well-versed Civil War aficionado will want to rally around it. ✪

Michael G. Kraus is curator of collections at Soldiers and Sailors Memorial Hall. He co-authored *The Civil War in Pennsylvania: A Photographic History*, and contributed to *The Civil War in Pennsylvania: The African American Experience*.